```
     (FILE 'HOME' ENTERED AT 10:59:45 ON 20 FEB 2006)

     FILE 'CAPLUS' ENTERED AT 10:59:54 ON 20 FEB 2006
L1              STRUCTURE UPLOADED

     FILE 'CAPLUS' ENTERED AT 11:00:24 ON 20 FEB 2006
L2       1461232 S L
                S L1

     FILE 'REGISTRY' ENTERED AT 11:01:03 ON 20 FEB 2006
L3            50 S L1

     FILE 'CAPLUS' ENTERED AT 11:01:04 ON 20 FEB 2006
L4            56 S L3
L5            24 S L4 AND PY<1999

     FILE 'STNGUIDE' ENTERED AT 11:05:43 ON 20 FEB 2006

     FILE 'CAPLUS' ENTERED AT 11:08:00 ON 20 FEB 2006
L6              STRUCTURE UPLOADED
                S L6

     FILE 'REGISTRY' ENTERED AT 11:08:29 ON 20 FEB 2006
L7             0 S L6

     FILE 'CAPLUS' ENTERED AT 11:08:30 ON 20 FEB 2006
L8             0 S L7
                S L6

     FILE 'REGISTRY' ENTERED AT 11:08:41 ON 20 FEB 2006
L9             0 S L6 SSS FULL

     FILE 'CAPLUS' ENTERED AT 11:08:42 ON 20 FEB 2006
L10            0 S L9 SSS FULL
L11              STRUCTURE UPLOADED
                 S L11

     FILE 'REGISTRY' ENTERED AT 11:15:53 ON 20 FEB 2006
L12           20 S L11

     FILE 'CAPLUS' ENTERED AT 11:15:54 ON 20 FEB 2006
L13           23 S L12

=> d l11
L11 HAS NO ANSWERS
L11              STR
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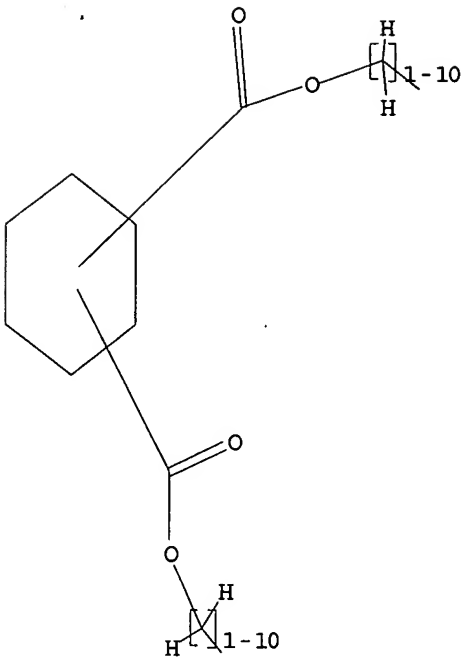


Structure attributes must be viewed using STN Express query preparation.

=> s l11 full
   REGIstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:22:14 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1342355 TO ITERATE

74.5% PROCESSED 1000000 ITERATIONS 12415 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.15

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1342355 TO 1342355
PROJECTED ANSWERS: 16278 TO 17052

L14 12415 SEA SSS FUL L11

L15 5768 L14

=> s l15 and py<1999
19111829 PY<1999
L16 3701 L15 AND PY<1999

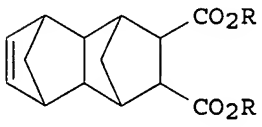
=> s l16 and alicyclic dicarboxylic acid
17795 ALICYCLIC
62023 DICARBOXYLIC
4103328 ACID
102 ALICYCLIC DICARBOXYLIC ACID
(ALICYCLIC(W)DICARBOXYLIC(W)ACID)
L17 1 L16 AND ALICYCLIC DICARBOXYLIC ACID

=> d ibib abs hitstr

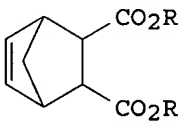
L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:38509 CAPLUS
DOCUMENT NUMBER: 118:38509
TITLE: Preparation of unsaturated **alicyclic dicarboxylic acid** dialkyl esters
INVENTOR(S): Sone, Takaaki; Inoue, Hiroshi; Matsumoto, Mitsuo
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan; Arakawa Chemical Industries, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04208249	A2	19920729	JP 1990-337368	19901130 <--
JP 2858944	B2	19990217		
PRIORITY APPLN. INFO.:			JP 1990-337368	19901130

OTHER SOURCE(S): CASREACT 118:38509; MARPAT 118:38509
GI



I

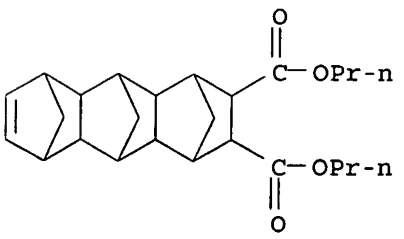


III

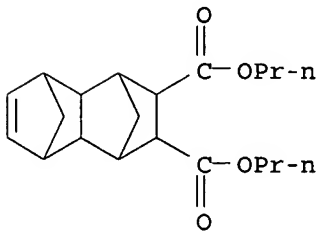
AB The title esters (I; R = C1-18 alkyl) are prepared by cycloaddn. of dialkyl fumarate and/or maleate with dicyclopentadiene (II), wherein first 1 mol part dialkyl fumarate and/or maleate and 0.3-0.7 mol part II are reacted to form a product mainly containing an unsatd. **alicyclic dicarboxylic acid** dialkyl ester (III; R = C1-18 alkyl) which (1 mol part) is then reacted with 0.1-0.6 mol part II while adjusting the total feeding of II to 0.6-1.0 mol part and the III:II mol ratio to 1:0.2. The process gives little byproducts such as II polymers and provides I of high purity in high yields. Thus, 5.0 mol di-Me fumarate and 2.5 mol II were heated to 170°and then warmed to 210° over .apprx.1 h to give a product mainly containing the 1:1 adduct III (R = Me) (IV) to which was added dropwise 1.5 mol II over 2 h while maintaining IV:II mol ratio ≤1:0.2 and heated at 210° for 1 h to give a mixture containing IV 2.62, the 2:1 adduct I (R = Me) (V) 2.20, and the 3:1 adduct 0.18 mol with 32.8, 55.0, and 6.8 mol% selectivity, resp. Vacuum distillation of the latter mixture gave 36.6 % IV (b.p. 122-127° at 7 mmHg) and 33.8% V (b.p. 176-178° at 8 mmHg).

IT **144988-08-9P 144988-09-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by cycloaddn. of fumarate ester with dicyclopentadiene)

RN 144988-08-9 CAPLUS
CN 1,4:5,8:9,10-Trimethanoanthracene-2,3-dicarboxylic acid, 1,2,3,4,5,8,8a,9,9a,10,10a-dodecahydro-, dipropyl ester (9CI) (CA INDEX NAME)



RN 144988-09-0 CAPLUS
CN 1,4:5,8-Dimethanonaphthalene-2,3-dicarboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, dipropyl ester (9CI) (CA INDEX NAME)




```
=> s l16 and cyclic dicarboxylic acid
        299907 CYCLIC
         62023 DICARBOXYLIC
       4103328 ACID
           102 CYCLIC DICARBOXYLIC ACID
                 (CYCLIC(W)DICARBOXYLIC(W)ACID)
L18          0 L16 AND CYCLIC DICARBOXYLIC ACID

=> s l16 and  dicarboxylic acid
         62023 DICARBOXYLIC
       4103328 ACID
         37247 DICARBOXYLIC ACID
                 (DICARBOXYLIC(W)ACID)
L19        261 L16 AND  DICARBOXYLIC ACID

=> s l16 and cyclic dicarboxylic acid diester
        299907 CYCLIC
         62023 DICARBOXYLIC
       4103328 ACID
         15342 DIESTER
             0 CYCLIC DICARBOXYLIC ACID DIESTER
                 (CYCLIC(W)DICARBOXYLIC(W)ACID(W)DIESTER)
L20          0 L16 AND CYCLIC DICARBOXYLIC ACID DIESTER

=> s l16 and  dicarboxylic acid diester
         62023 DICARBOXYLIC
       4103328 ACID
         15342 DIESTER
           136 DICARBOXYLIC ACID DIESTER
                 (DICARBOXYLIC(W)ACID(W)DIESTER)
L21          4 L16 AND  DICARBOXYLIC ACID DIESTER

=> d 1-4 ibib abs hitstr

L21  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         1990:57438  CAPLUS
DOCUMENT NUMBER:          112:57438
TITLE:                    Optical resins from dicarboxylic acid diesters and
                          allyl compounds
INVENTOR(S):              Murata, Yoshishige; Koinuma, Yasumi; Amaya, Naoyuki;
                          Otsu, Takayuki; Nisimura, Masafumi
PATENT ASSIGNEE(S):       Nippon Oils & Fats Co., Ltd., Japan
SOURCE:                   U.S., 6 pp. Cont. of U.S. Ser. No. 30,299, abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     US 4855374            A     19890808    US 1988-211166          19880622 <--
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PRIORITY APPLN. INFO.: US 1985-806735 A3 19851209
US 1987-30299 A1 19870323

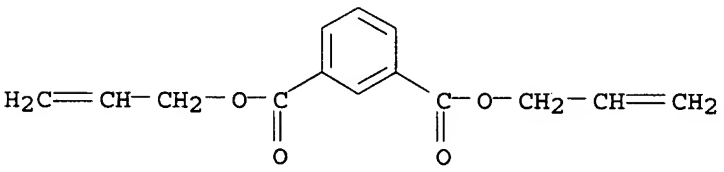
AB An optical resin with high refractive index, low shrinkage, and good heat resistance is prepared by radical polymerization of a **dicarboxylic acid diester** with a crosslinking monomer having ≥1 allyl groups. Thus, polymerizing 80 parts dicyclopentyl fumarate and 20 parts diallyl fumarate in the presence of 3 parts tert-butylperoxy pivalate at 50° for 24 h and heating at 80° for 4 h and 120° for 2 h gave a copolymer with shrinkage 3.5%, glass-transition temperature 163°, refractive index 1.522, and good weather resistance, vs. 12.3, 115, 1.590, and poor, resp., for polystyrene.

IT **103364-37-0P 112368-77-1P 112368-82-8P 125026-23-5P 125051-40-3P**
RL: PREP (Preparation)
(preparation of, with high refractive index and low shrinkage, heat-resistant)

RN 103364-37-0 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with (E)-bis(phenylmethyl) 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

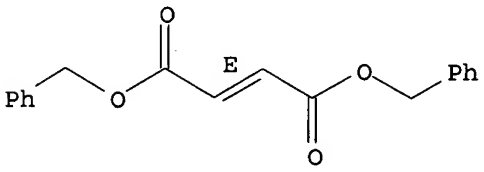
CRN 1087-21-4
CMF C14 H14 O4



CM 2

CRN 538-64-7
CMF C18 H16 O4

Double bond geometry as shown.

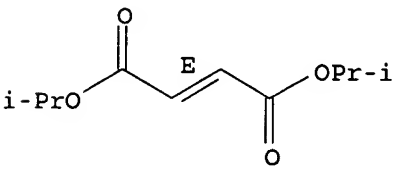


RN 112368-77-1 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with (E)-bis(1-methylethyl) 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

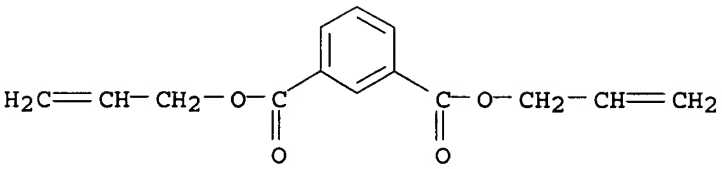
CRN 7283-70-7
CMF C10 H16 O4

Double bond geometry as shown.



CM 2

CRN 1087-21-4
CMF C14 H14 O4

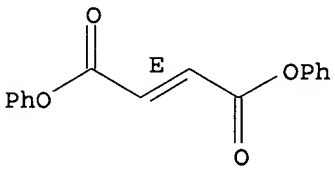


RN 112368-82-8 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with (E)-diphenyl 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

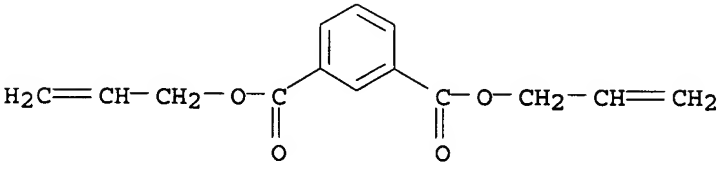
CRN 6338-19-8
CMF C16 H12 O4

Double bond geometry as shown.



CM 2

CRN 1087-21-4
CMF C14 H14 O4

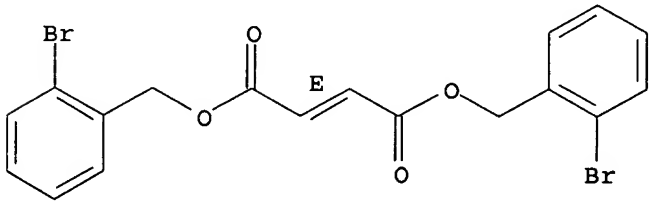


RN 125026-23-5 CAPLUS
CN 1,3,5-Benzenetricarboxylic acid, tri-2-propenyl ester, polymer with (E)-bis[(2-bromophenyl)methyl] 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

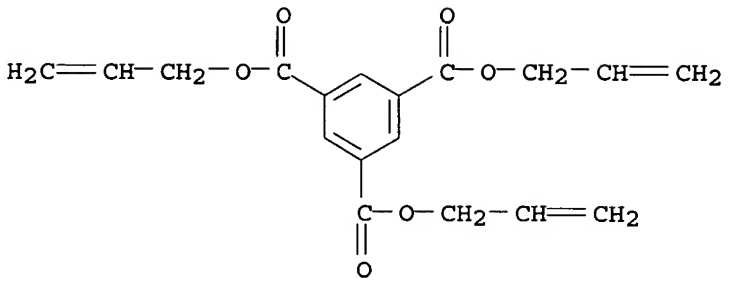
CRN 112368-84-0
CMF C18 H14 Br2 O4

Double bond geometry as shown.



CM 2

CRN 17832-16-5
CMF C18 H18 O6

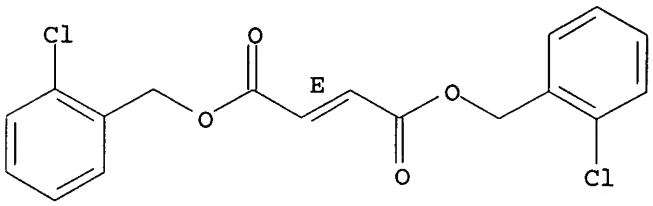


RN 125051-40-3 CAPLUS
CN 1,3,5-Benzenetricarboxylic acid, tri-2-propenyl ester, polymer with (E)-bis[(2-chlorophenyl)methyl] 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

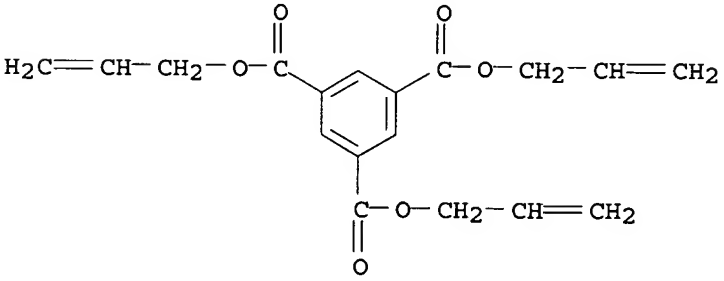
CRN 112388-87-1
CMF C18 H14 Cl2 O4

Double bond geometry as shown.



CM 2

CRN 17832-16-5
CMF C18 H18 O6



L21 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:445335 CAPLUS
DOCUMENT NUMBER: 111:45335
TITLE: Staining-resistant contact lenses with high oxygen permeability
INVENTOR(S): Ootsu, Takayuki; Amaya, Naoyuki; Murata, Takashige; Kubota, Satoshi; Mogami, Takao
PATENT ASSIGNEE(S): Nippon Oils & Fats Co., Ltd., Japan; Seiko Epson Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63132216	A2	19880604	JP 1986-277818	19861122 <--
JP 2565316	B2	19961218		

PRIORITY APPLN. INFO.: JP 1986-277818 19861122

AB The title contact lenses are prepared by homopolymg. or copolymg. unsatd. dicarboxylic acid diesters R1O2CCH:CHCO2R2 (I; one of R1 and R2 is CmHnF2m+1-n (m = 2-18; n = 1-36) and the remainder is C1-12 alkyl, alkenyl, C3-12 cycloalkyl] or copolymg. ≥1 I with vinyl monomers and/or crosslinkable polyfunctional monomer. Thus, 8 parts tert-Bu 2,2,2-trifluoro-1-(trifluoromethyl)ethyl fumarate was copolymd. with 2 parts diallyl isophthalate for 24 h at 70° in the presence of 0.3 part Bz2O2 to give a copolymer, which was heated 2 h at 100° and ground to give a material suitable for manufacturing a contact lens. This lens exhibited O transmission 6.17 + 10-10 mL-cm/cm2-s-mmHg and no staining after immersion in a 0.2% albumin lysozyme solution for 24 h at 37°, compared with 1 + 10-11 mL-cm/cm2-s-mmHg and staining for a control lens of 50:50 2-hydroxymethyl methacrylate-Me methacrylate copolymer.

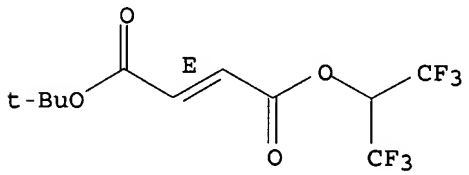
IT **120515-06-2 120515-10-8 120534-22-7**
121601-76-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(contact lens manufacture from, with improved staining resistance and high oxygen permeability)

RN 120515-06-2 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with (E)-1,1-dimethylethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

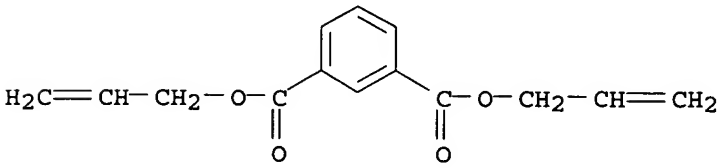
CRN 120515-05-1
CMF C11 H12 F6 O4

Double bond geometry as shown.



CM 2

CRN 1087-21-4
CMF C14 H14 O4

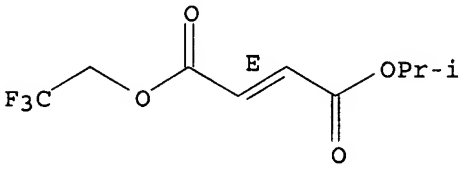


RN 120515-10-8 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with ethenyl 2,2-dimethylpropanoate and (E)-1-methylethyl 2,2,2-trifluoroethyl 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

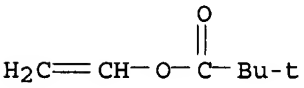
CRN 109998-01-8
CMF C9 H11 F3 O4

Double bond geometry as shown.



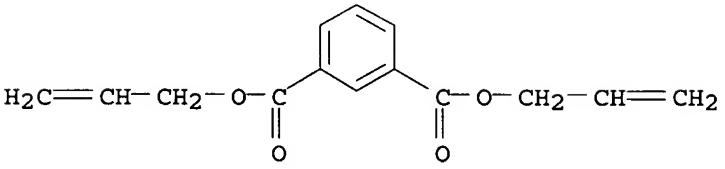
CM 2

CRN 3377-92-2
CMF C7 H12 O2



CM 3

CRN 1087-21-4
CMF C14 H14 O4

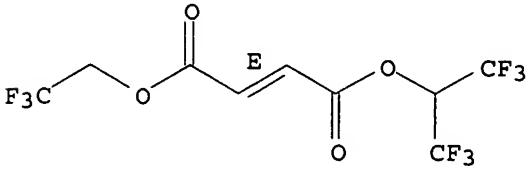


RN 120534-22-7 CAPLUS
CN 1,4-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with ethenyl propanoate and (E)-2,2,2-trifluoroethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

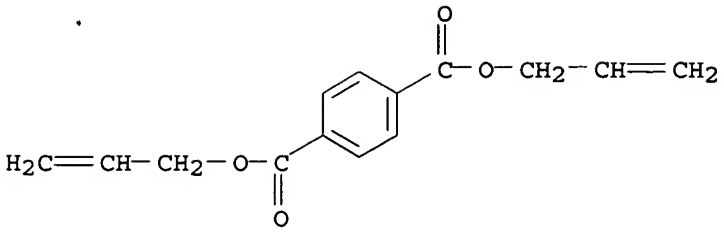
CRN 120534-21-6
CMF C9 H5 F9 O4

Double bond geometry as shown.



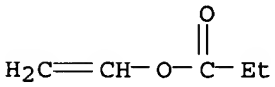
CM 2

CRN 1026-92-2
CMF C14 H14 O4



CM 3

CRN 105-38-4
CMF C5 H8 O2

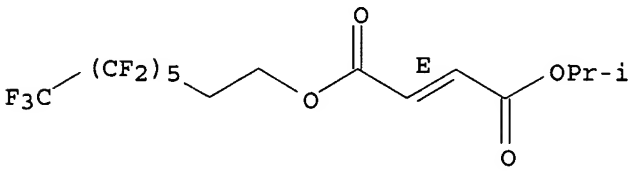


RN 121601-76-1 CAPLUS
CN 1,3-Benzenedicarboxylic acid, di-2-propenyl ester, polymer with ethenyl 2-propenoate and (E)-1-methylethyl 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-butenedioate (9CI) (CA INDEX NAME)

CM 1

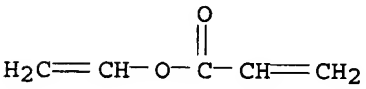
CRN 86714-93-4
CMF C15 H13 F13 O4

Double bond geometry as shown.



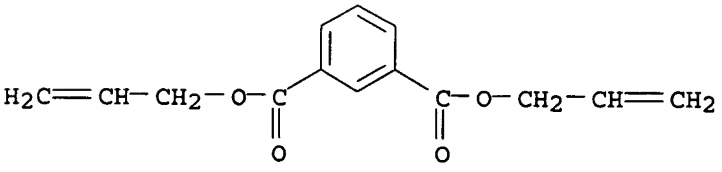
CM 2

CRN 2177-18-6
CMF C5 H6 O2



CM 3

CRN 1087-21-4
CMF C14 H14 O4



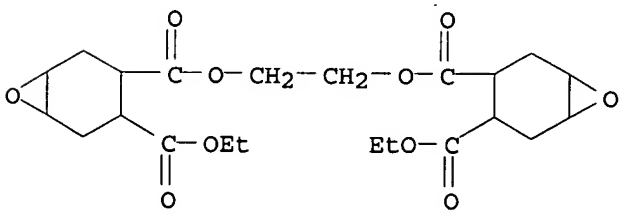
L21 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1964:82783 CAPLUS
DOCUMENT NUMBER: 60:82783
ORIGINAL REFERENCE NO.: 60:14473b-d
TITLE: Epoxy compounds
INVENTOR(S): Hosotani, Toru; Yamagishi, Minoru; Konuma, Sadao
PATENT ASSIGNEE(S): Kanegafuchi Spinning Co., Ltd.
SOURCE: 4 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 39002473		19640310	JP	19600929 <--

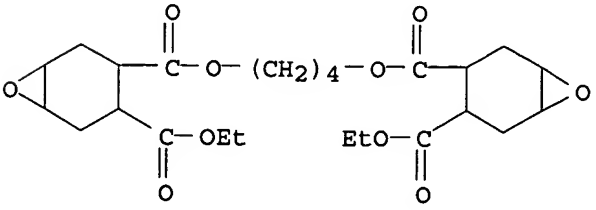
AB Into 152 g. 4-cyclohexene-1,2-dicarboxylic anhydride stirred at 110-20° was dropped 31 g. ethylene glycol during 1 h., and the whole stirred 1 h. at 130-40° to give 161 g. product (I), m. 123-30°. I (30 g.) dissolved in 135 g. EtOH was refluxed with 8 cc. concentrated H_2SO_4 for 8 h. to give 22.5 g. di-Et ethylenebis(tetrahydrophthalate) (II), b3 122-7°. Similarly were prepared di-Bu propylenebis(tetrahydrophthalate) (III) (b5 175-8°), di-Et butylenebis(tetrahydrophthalate) (IV) (b3-4 117-25°), V (R = Bu, Z = $CH_2CH_2OCH_2CH_2$) (VI) (b3-4 165-7°), and V (R = Pr, Z = p-$C_6H_4CMe_2C_6H_4$-p) (VII) (b5.5-7 152-65°). Into a mixture of 21.1 g. II and 10 cc. Me_2CO was dropped 40 cc. solution of AcOOH in Me_2CO during 1 h. keeping the solution at 40°, the whole agitated at 40° for 5 more hrs. and evaporated in vacuo at below 40°, 10 cc. cetylbenzene added, the mixture evaporated in vacuo at below 50°, and the residue distilled in vacuo to give 17.2 g. the corresponding diepoxide, b3 145-6°. Similarly prepared were the diepoxides from III (b4.5 188-9°), from IV (b5 152-6°), from VI (b1 164-7°), and from VII (b3.5-5 164-84°). The products are useful as intermediates for the manufacture of synthetic resins.

IT **100270-86-8**, 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, diethyl ethylene ester **101203-13-8**, 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, diethyl tetramethylene ester **103651-42-9**, 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, dibutyl trimethylene ester **104695-62-7**, 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, dibutyl oxydiethylene ester
(preparation of)

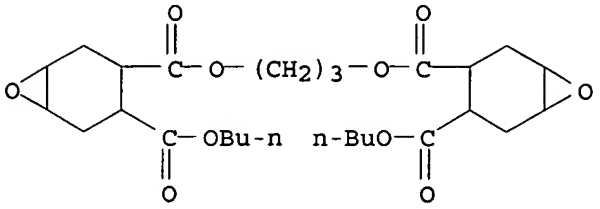
RN 100270-86-8 CAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, diethyl ethylene ester (7CI) (CA INDEX NAME)



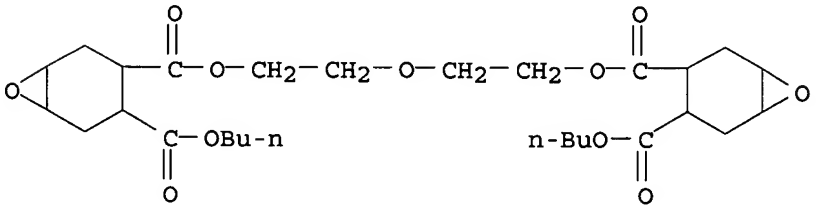
RN 101203-13-8 CAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, diethyl tetramethylene ester (7CI) (CA INDEX NAME)



RN 103651-42-9 CAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, dibutyl trimethylene ester (7CI) (CA INDEX NAME)



RN 104695-62-7 CAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, dibutyl oxydiethylene ester (7CI) (CA INDEX NAME)



L21 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1962:410885 CAPLUS
DOCUMENT NUMBER: 57:10885
ORIGINAL REFERENCE NO.: 57:2229h-i,2230a-i,2231a-c
TITLE: Coating compounds
INVENTOR(S): Ikeda, Carol K.
PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.
SOURCE: 11 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3010918		19611128	US	19580526 <--
PRIORITY APPLN. INFO.:			US	19580526

AB Dioxa heterocydes (I) were prepared by condensing acrolein or an α-substituted acrolein with a triol under acidic conditions at 50-110° with a solvent that formed a binary with H2O. Esters of these compds., were prepared by ester interchange or by using the acid chloride of the desired acid. Condensing acrolein with an epihalohydrin also gave the desired compds. Thus, a mixture of 5 mol 1,1,1-trimetholethane, 5 mol acrolein with a trace of hydroquinone inhibitor, 375 g. hexane, and 7.5 g. oxalic acid was refluxed 6.5 h. with a continuous removal of H2O, then heated to 60° while reducing the pressure to 1 mm. to remove hexane and acrolein. Distillation of the residue gave an oil, b0.5-1 81-92°, which was dissolved in hexane and C6H6, washed, dried, and the solvent removed by heating to 60° at 1 mm. to give 623 g. 5-hydroxymethyl-5methyl-2-vinyl-1,3-dioxane (II). The sebacic acid ester of II was prepared by refluxing a mixture of di-Me sebacate, II, toluene, Na2CO3, and NaOMe for 3 h. while removing MeOH, washing, and drying the resulting solution and then removing the solvent. Other polycarboxylic acid diesters of II prepared were the maleic acid diester, acetonedicarboxylic acid diester, phthalic diester, terephthalic diester, pyromellitic tetraester, tetrahydronaphthalene-1,2,6,7-tetracarboxylic ester, (5-methyl-2-vinyl-1,3-dioxane-5-yl)methoxysuccinic diester, thiodipropionic diester, trimerized 18-C vegetable oil acid triester, and itaconic diester. Other compds. prepared from II were the tricyanurate, the triorthoaluminate, and the diorthotitanate. Similarly

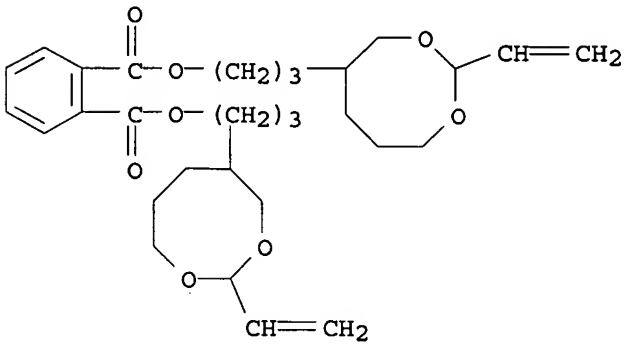
prepared were 4-(3-hydroxypropyl)-2-vinyl-1,3-dioxepane (III), the phthalic, adipic, azelaic, diglycolic, dinterized 18-C vegetable oil, and isophthalic diesters, the homocyelopentanetetracarboxylic ester, the diurethane, and triorthoformate of III, 2-isopropenyl-6-propyl-1,3-dioxane-4-propanol, and its β-thiodipropionic acid diester, 2-isopropenyl-5-fluoro-5-methylol-1,3-dioxane, and its di(trifluoromethyl)terephthalic acid diester, 2-(α-phenylvinyl)-5-benzyl-5-methylol-1,3-dioxane, and its maleic acid diester, 2-vinyl-5-(m-tolyl)-5-methylol-1,3-dioxane, and its adipic acid diester, 2-vinyl-5-cyano-5-hydroxyethoxyethoxy-1,3-dioxane, and its 3-methyl-3-nitrobutane-1,2-**dicarboxylic acid diester**, 2-vinyl-5-acetylamino-5-methylol-1,g-dioxane, and its pyromellitic diester, 2-isopropenyl-5-hydroxymethyl-5-ethyl-1,B-dioxane, and its pyromellitic diester, 2-(a-butylvinyl)-5-ethyl-5-hydroxymethyl-1,3-dioxane, and its pyromellitic tetraester, 2-(α-cyanovinyl)-5-(co-hydroxypropyl)-1,3-dioxane, and its mellille acid hexaester, 5-(ω-hydroxyethyl)-2-vinyl-1,3-dioxane, and its octahydronaphthalenetetracarboxylic acid tetraester, the triethylene glycol ether of 2-vinyl-5-methyl-5-methylol-1,3-dioxane, and its diphthalate, 2-vinyl-5-methylol-5-hexyloxymethyl-1,3-dioxane, and its disuccinate, the orthophosphoric acid and boric acid triesters and the benzenephosphonic acid diester of 2-vinyl-5-methyl-5-methylol1,3-dioxane, 2-vinyl-4-ethyl-5-propyl-5- methylol-1,3- dioxane, and its mixed dioxanyl-Et silicate ester, the carbonate of 2-vinyl-5-(β-fluoroethyl)-5-methylol-1,3-dioxane, 1,2-bis(2-vinyl-1,3-dioxan-5-yl)ethane, the diester prepared from 2-vinyl-4-carbomethoxy-5-chloro-1,3-dioxane and triethylene glycol, the diester of 2-isopropenyl-4,6-bis(pchlorophenyl)-5-(ω-carbethoxyethyl)-1,3-dioxane and bis(hydroxymethyl)durene, the diester of 2-isopropenyl-5-phenylsulfonyl-5-carbethoxy-1,3-dioxane and triethylene glycol, the diurethane of 2-vinyl-5-allyl-5-methylol-1,3-dioxane and tolylene diisocyanate, 5-bis(2-isopropenyl-1,3dioxan-4-yl)benzene, the diester from 2-vinyl-5-methylol-5(ω-cyanoethoxymethyl)- 1,3-dioxane and 1,4-bis(chloromethyl)benzene, the tricyanurate from 2-vinyl-5-chloromethyl-5-methylol-1,3-dioxane and triallyl cyanurate, the diester of 2-vinyl-5-(β-chloroethoxymethyl)-5-methylol-1,3dioxane and the di-Me ether of dimethylolurea, the hexaether of 2-vinyl-5-(β-fluoroethoxymethyl)-5-methylol1,3-dioxane and hexakis(methoxyntethyl)melamine, the diester of Et β-[4-(2-vinyl-4-methyl-1,3-dioxan-6-yl)cyclohexyl]propionate and ethylene glycol, the diamide of 2-vinyl-4-phenyl-6-carbethoxy-1,3-dioxane and hexamethylenediamine, the diester of 2-vinyl-5-chloro-6-hydroxy-1,3-dioxepane and di-Me cyclohexenedicarboxylate, the diester of 2-vinyl-4-methylol-1,3-dioxepane and di-Me sebacate, the diester of 2-vinyl-5-hydroxy-1,3-dioxepane and di-Et maleate, the diester of 2-vinyl-4-(ω-hydroxypropyl)-1,3-dioxepane and di-Me itaconate, 2-vinyl-5-(ω-hydroxypropyl)1,3-dioxocane and its phthalic diester, the tetraether of 2-vinyl-5-methylol-1,3-dioxocane and tetra(bromomethyl)methane, the diester of 2-vinyl-6-hydroxy-1,3-dioxocane and di-Et adipate, the diester of 5-vinyl-O-carboxyethyl1,3-dioxonane and ethylene glycol. These compds. were used for coatings, plasticizers, catalysts, hardeners, anti-skinning agents, and surface active agents. U.S. 3,010,923; 11 pp. Similarly prepared were compds. and esters containing groups such as 4-(4'-hydroxybutyl)-2-vinyl-1,3-dioxolane, and the isophthalic acid, sebacic acid, adipic acid, maleic acid, acetonedicarboxylic acid, phthalic, and terephthalic diesters, the pyromellitic, and tetrahydronaphthalene-1,2,6,7-tetracarboxylic esters, the (2-vinyl-1,3-dioxolane-yl)butoxysuceinic, and thiodiproplonic diesters, the trimerized 18-C vegetable oil acid triester and the itaconic diester, the tricyanurate, diurethane, triorthoformate, triorthoaluminate, and diorthotitanate, 4-hydroxymethyl-2-vinyl-1,3-dioxolane and the adipic acid, azelaic acid, diglycolic acid, dimerized 18-C vegetable oil and orthophthalic diesters, and the homocyelopentanetetracarboxylic ester, the dicarbonate of 2-vinyl-4-(p-hydroxybenzyl)-1,3-dioxolane, the phthalic acid diester of 2-vinyl-4-phenyl-5-hydroxybutyl-1,3-dioxolane, and adipic acid diester of 2-vinyl-4[(4-hydroxycyclohexyl)methyl]-1,3-dioxolane, the phosphoric acid triester and benzenephosphonic acid diester of 2-vinyl-4-hydroxybutyl-1,3-dioxolane, the tetraester of pentaerythritol and 2-vinyl-4-ω-carbomethoxyoctyl-1,3-dioxolane, the tetraester of

tetra-Et orthosilicate and 2-vinyl-4-phenyl-5-hydroxypropyl-1,3-dioxolane, 1,4-butanediol diesters of 2-vinyl-4-(n-heptyl)-4-methyl-5-carbomethoxy1,3-dioxolane, 2-vinyl-4-(p-tolyl)-5-carbomethoxy-1,3-dioxolane, 2-vinyl-4-(β-chloroethyl)-4-methyl-5-carbomethoxy 1,3-dioxolane, 2-vinyl-4-(4',4',4'-trifluorobutyl)-5-carbomethoxy-1,3-dioxolane, 2-vinyl-4-(β-chloroethoxyethyl)-5-carbomethoxy-1,3-dioxolane, and the trimethylolethane triesters of 2-vinyl-4-(β-fluoroethoxyethyl)-5-carbethoxy-1,3dioxolane, 2-vinyl-4-(β-cyanoethoxyethyl)-5-carbethoxy-1,3dioxolane, 2-vinyl-4-(β-butoxyethyl)-5-carbethoxy-1,3-dioxolane, 2-vinyl-4-(9-decenyl)-5-carbethoxy-1,3-dioxolane, and 2-vinyl-4-(ω-cyanopropyl)-5-carbethoxy-1,3-dioxolane. Also reported were compds. prepared using substituted acroleins.

IT **103673-31-0**, Phthalic acid, bis[3-(2-vinyl-1,3-dioxocan-5-yl)propyl] ester **107542-52-9**, Phthalic acid, bis[2-[2-[2-[(5-methyl-2-vinyl-m-dioxan-5-yl)methoxy]ethoxy]ethoxy]ethyl] ester
(preparation of)

RN 103673-31-0 CAPLUS

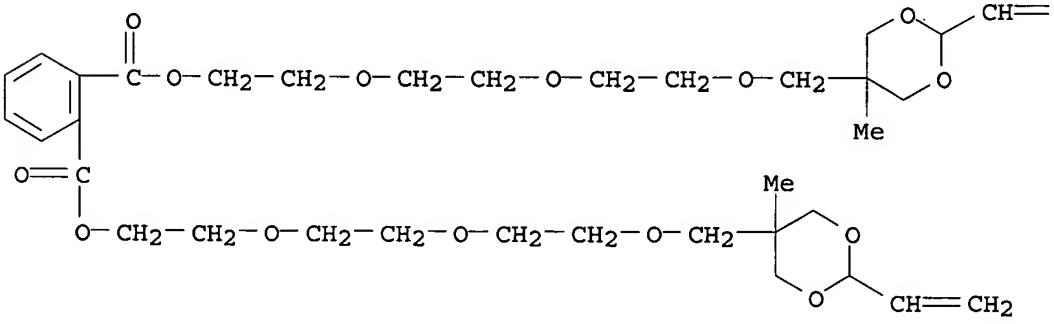
CN Phthalic acid, bis[3-(2-vinyl-1,3-dioxocan-5-yl)propyl] ester (7CI) (CA INDEX NAME)



RN 107542-52-9 CAPLUS

CN Phthalic acid, bis[2-[2-[2-[(5-methyl-2-vinyl-m-dioxan-5-yl)methoxy]ethoxy]ethoxyl]ethyl] ester (7CI) (CA INDEX NAME)

PAGE 1-A



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